

AIR WAR COLLEGE

AIR UNIVERSITY

LEADING IN THE ARCTIC; TRANSLATING THE UNITED
STATES ARCTIC STRATEGY INTO OPPORTUNITIES FOR
PEACE AND STABILITY.

by

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DISCLAIMER

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Biography

COL Shanon Mosakowski is a student at the Air War College, Air University, Maxwell AFB, AL. His passion for the outdoors drew him to Alaska and into the Arctic many years ago during the era of the Cold War. He studied biology at the University of Alaska Anchorage, holds a Bachelor's of Science degree in Environmental Biology from the University of North Alabama and a Master's Degree in Management from Webster's University. A US Army Field Artillery officer, his assignments have primarily been in airborne and air assault units, training often in Arctic and Sub-Arctic conditions. Also a graduate of multiple courses from the Northern Warfare School, he has extensive experience training in cold weather climates and mountainous environments. Multiple tours of duty in Alaska, including service with the Eskimo Scouts of the 207th IN Group, have given him a unique insight into people and places of the Arctic and the challenges of leading and operating in one of the most unforgiving climates on earth.

Abstract

The Arctic is a vast, often cold, and still relatively pristine landscape. A recent rise in the temperature cycle is causing significant melting of the sea ice in the region. This change is presenting new challenges and opportunities for the Arctic nations and indigenous people living there, as each seeks to protect their interest. However, this friction is not new; the region has historically been of strategic importance to the United States, both from an economic and national security standpoint. The Arctic's future depends primarily on the eight countries who are members of the Arctic Council and share ownership of this region; with Russia, Canada, and the United States being the primary stakeholders. This essay's purpose is to further the ongoing dialogue on what type of organizational headquarters is best suited for the region, considering the complexity of the environment, strategic guidance and other factors that enhance the effectiveness of an organization.

This paper uses an empirical approach to argue the Arctic requires a different method to leading US efforts in the region. There are three recommendations derived from this study. The first recommendation supports the idea of a civilian-led headquarters, subordinate to US Northern Command (USNORTHCOM), which can more efficiently focus efforts on what are primarily scientific, economic, and diplomatic issues. The second recommendation is to base the headquarters in or near the Arctic, improving credibility amongst the Arctic nations and external partners while improving continuity of effort, increasing situational awareness, and most importantly building trust between all parties. The third recommendation focuses on leveraging the previously mentioned headquarters to lead bi-annual exercises in the Arctic region, providing a mechanism to train the civilians in their roles guiding the military, increasing the collaboration

of all interested parties while putting to test the new systems and capabilities needed to make year-round operations in the Arctic a reality.



A changing climate will have real impacts on our military and the way it executes its missions..... Climate change is a long-term trend, but with wise planning and risk mitigation now, we can reduce adverse impacts downrange.... No nation can deal with it alone. We must work together, building joint capabilities to deal with these emerging threats.¹

Chuck Hagel,
June 2014

Introduction

Throughout history, major events from natural disasters to wars, have challenged leaders' ability to adapt and shape their organizations to deal with these threats to peace and stability. The melting of the polar ice cap and prediction of an Arctic Ocean open year round presents a similar challenge to the global status quo as nations look towards gaining an advantageous position in the region. This competitive friction is creating new challenges for the eight Arctic nations, the indigenous peoples, and other countries interested in the treasures of this region.² Most Arctic nations and interested parties speak of peaceful collaboration and more collective efforts, but this language is against the backdrop of a more internationally aggressive Russia, conducting operations in Ukraine and Syria, and China, building islands and expanding their reach in the South China Sea. These actions are causing their separation from the international order while bringing the two nations closer together in the polar region.³

For those parties capable and willing to invest and take a risk in the Arctic, the stakes are high, creating more friction as countries align military capabilities in the region to support their activities. This reality is stoking some fears that the US and Russia are returning to a Cold War stance, but this competitive nature of nations does not have to mean conflict, the changes in the north call for collective action rather than collision.⁴ An open Arctic ocean could be a net positive for those countries that can correctly calculate the cost and position

themselves to take advantage of the changes over time as the ice opens up, assuming this trend continues.

Responsible exploitation depends on shared understanding and collective efforts in the realms of science, technology, and military-military cooperation, with diplomacy in the lead.⁵ The US strategic guidance that has emerged, in light of the Arctic realities, infers collective synchronization across the full spectrum of joint, intergovernmental, interagency and nongovernmental organizations with the military primarily in a supporting role.⁶ This direction is a significant change from the typical combatant command relationships, with the military in the lead. The intent of the guidance is to encourage moving forward in ways that best set the conditions for cooperation and collaboration, setting the example for our partners. The details of moving forward in the Arctic are in the National Strategy for the Arctic Region, DoD Arctic Strategy, and military services Arctic strategies, amongst other lesser documents.

The challenge for the US and the Arctic nations lays in managing this friction, resolving problems by diplomatic means, without using military force in an offensive role. The Arctic Council is the forum where most matters concerning the region are dealt with though it has no budget, law making ability or capability of directing military force; it has been the central body in collective efforts and collaboration since its inception.⁷ That leaves keeping the peace and enabling progress the mission of the Arctic nation's militaries. For the US and Canada, that role is filled by USNORTHCOM, the combatant command for the region, "assigned responsibility as the advocate of the Arctic".⁸ EUCOM shares in the responsibility focused on security cooperation in the region with traditional partners.⁹ The pending question is; given the challenges above, is the military headquarters assigned to

implement the National Arctic Strategy optimally designed to accomplish the complex task in front of it and if not, what should be done to rectify the situation?

Thesis

This paper uses an empirical approach to argue that the challenges the US faces in the Arctic require a non-standard civilian-led interagency headquarters, subordinate to USNORTHCOM, based in or near the area of operations, able to employ the whole of government, to achieve alignment of actions in the region with the national strategic guidance.



Geography

Alaska's position near the roof of the world, Mitchell saw, had previously kept it far away from the traditional East-West trade routes over which older forms of transportation had traveled. The coming of aircraft made travel possible between any two points on earth, the great-circle routes. Since Alaska lay astride the great-circle route between the US and Asia, this generally neglected possession of the United States took on new strategic importance.¹⁰

The dynamic and dangerous environment that Mitchell experienced in the Arctic has changed little since the beginning of the 21st century. Now, rapidly shifting temperatures along with other variables are challenging the Arctic nations to predict future conditions and plan for future. A better grasp of the situation requires an understanding of essential elements of Arctic geography, both physical and human. These include the boundaries and conditions that help define the problem and accompanying ownership of resources both on land and under the ice. On land, the borderlines are known and accepted but in and under the water, the story is vastly different.

The opening up of the waters and new technology are providing access and capability to further research on the underwater geography. Numerous land claims are being made amongst the Arctic nations based on where the continental shelves of their countries end, with Russia at the forefront of activity as it stands to gain a legal claim to an area up to one-half of the Arctic ocean, a significant increase and extension of its resource base.¹¹ These claims rest primarily on the United Nations Convention on the Law of the Sea (UNCLOS) which codifies a nation's right to the resources within an economic exclusion zone (EEZ) defined by a range of 200 miles from the coastline. This range can be pushed out farther, to the end of a continental shelf, but the onus is the nation making the claim to support their argument with scientific proof.¹²¹³

The Arctic and more specifically, Alaska and Canada, are of strategic importance to the US, whether frozen or not. Their position at the top of the world made them a choice location for air bases and other military activities in the 20th century, with a heavy focus on deterring Russian aggression during the Cold War. Major defense programs, such as “Project 572”, provided early warning from over 60 radar stations in the Arctic, arrayed towards Russia.¹⁴

The Arctic still provides a short route to other critical parts of the northern hemisphere today and serves as a physical barrier to Russian aggression based on its immense size and remoteness, but the melting of the ice cap is removing part of that year-round defense in depth. The permanent and periodic military presence in the region will be even more critical in the future. These forces add to the protection of this “key terrain”; providing air cover, maritime defense, and ultimately security for the residents of both nations, both above and below the Arctic Circle.¹⁵

Physical Geography

Physical geography helps to frame the complex topic of the melting polar ice cap and the globally connected results. The Arctic, defined according to US Code 15, section 4111; “means all United States and foreign territory north of the Arctic Circle and all United States territory north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwim Rivers; all contiguous seas, including the Arctic Ocean and the Beaufort, Bering, and Chukchi Seas; and the Aleutian chain.”¹⁶

This polar region is an 11 million square miles vast and frozen expanse, best known for four distinguishing features, three clearly outlined in figure 1; the North Pole at 90° North, the Arctic Circle at 66°33' north, the 50 °F July isotherm line and the Polar Ice Cap.¹⁷ The ice

in the Arctic covered an area as large as 2.9 million square miles (United States land mass in 3.5 million) as recent as 1983 but shrank to 1.7 million square miles by 2007.¹⁸ This ice body moves in a flow from that has increased its rate of movement almost two-fold in 113 years, based on observations from two different expeditions at either end of the period.¹⁹ An [animation](#) created by the National Oceanic and Atmospheric Administration (NOAA) clearly shows the reality of the Arctic sea ice melt from 1987-2014.²⁰

Figure 1.
Features of the Arctic; Arctic Circle, North Pole, and 50-degree isotherm.²¹



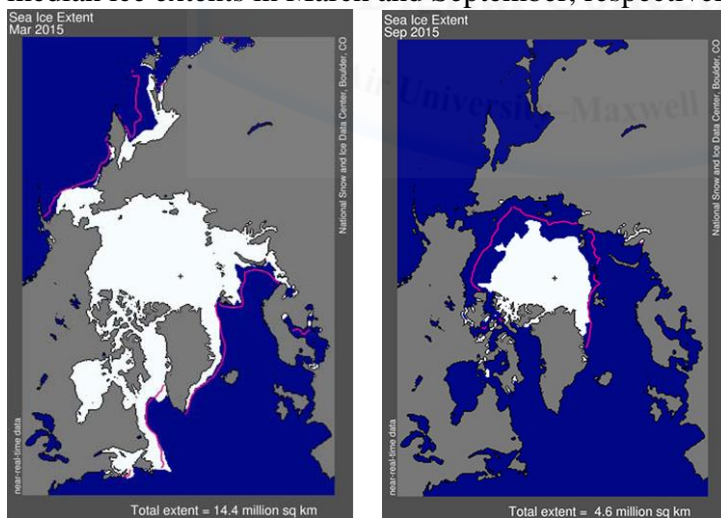
Source: "Arctic map". Map. *Encyclopædia Britannica Online*. Web. 08 Feb. 2016.
<http://www.britannica.com/place/Arctic/images-videos/The-average-location-of-the-50-F-July-isotherm-in/100342>

The Ice

Initially, the interior of the Arctic Ocean was thought to be free of ice as the warmer currents moved north. The theory was the currents coming from the Atlantic, and Pacific would cause the center to melt, leaving a large ocean open in the middle. Another theory postulated there being a land mass upon which the icecap sat; both were proved wrong through scientific research and exploration. It is now believed the ice expands and contracts at least partly based on variances including wind driven by atmospheric pressure and two currents known as the Beaufort Gyre and Transpolar Drift Stream. Simply put, the first current is an ice builder as it keeps ice in the Beaufort Sea where it can thicken into multiyear ice. The second current is an ice destroyer, as it flushes ice out around Greenland where it melts away, further preventing the buildup of multiyear ice in a large part of the Arctic.

Figure 2.

Average sea ice extent in March 2015 (left) and September 2015 (right) illustrate the respective winter maximum and summer minimum extents. The magenta line indicates the median ice extents in March and September, respectively, during the period 1981-2010.²²



Source: Sea Ice Cover. 2015. http://www.arctic.noaa.gov/reportcard/sea_ice.html.

Also, at play is the warmer North Atlantic current that brings warm water into the region, staying suspended under a cold water halocline which prevents the tepid water from melting the ice. Scientists are still working to understand all of the variables and how they interact in

the thinning of the ice. This work will inform future scientific expeditions, projections, and investments.²³

The Water

The Arctic Ocean is 5.4 million square miles; the smallest of oceans, the eight Arctic nations surround it with three major funnels through which water flow and the occasional ship or submarine pass. Two rivers, the Yenisey, and Lena move as much water into the Arctic as the Mississippi and the Nile move into their respective saltwater bodies of water. The remaining smaller rivers account for over “10 percent of the world’s total freshwater runoff that drastically affects the polar ice as it sits on top of the saltwater and freezes. This process further influences the circulation of the cold water as it moves into the Atlantic.”²⁴ This water circulates through two major water connections between the Arctic Ocean; the Bering Strait, between Alaska and Russia and the Fram Strait; between Greenland and Norway. Adjoining the straights are the land masses that lay inside of the Arctic Circle or the 66° N line of latitude; this includes the shallow continental shelves mentioned previously.²⁵

Weather and Climate

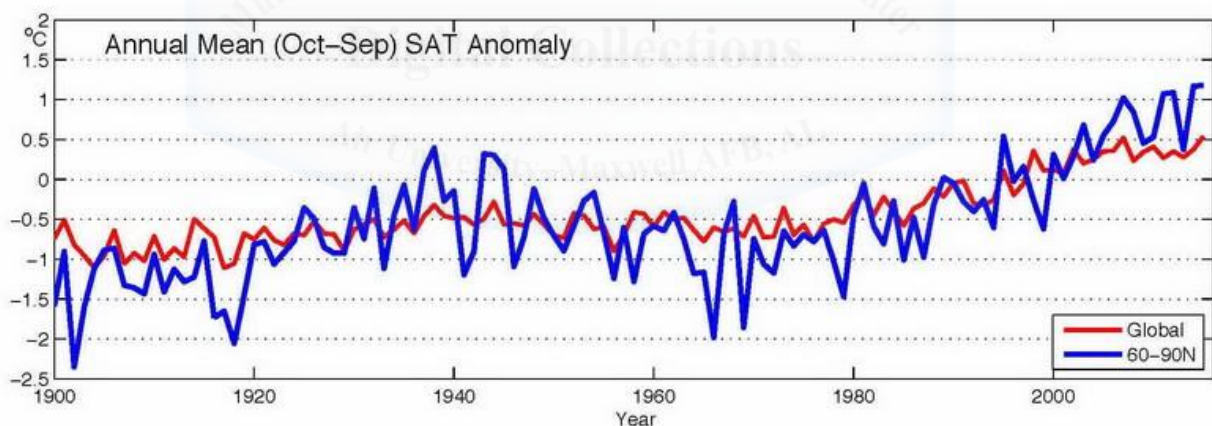
The Arctic is often imagined as a vast frozen expanse most of the year but as one moves from the North Pole to the south and summer arrives, this deep freeze reality changes as maritime influences, tied to tidal movements from the Pacific and Atlantic, move warmer water into the Arctic.

The climate represents a measured average over periods of up to “30 years” is predicted out “50-100 years” broken into two categories: maritime climates along the coast and interior climates. Factors such as temperature, humidity, precipitation, wind, and atmospheric pressure, averaged over the long-term make up climate. In the winter, along the

Arctic coast tends to be warmer and damp with deep snowfall. The Arctic interior tends to be colder and dryer with low temperatures in the average range of “-40 degrees Celsius (-40 degrees Fahrenheit)”. In the summer time, the coast is wet and cool compared to the interior that is dry and hot with “30 degrees Celsius (86 degrees Fahrenheit)” being in the high range.

Weather, on the other hand, varies widely based on location and season. The weather in the Arctic makes it one of the most challenging places on earth to live and subsist in. The sparse population in the region further substantiates this reality. The global trend has been one of rising temperatures over the last century with those in the Arctic showing greater variation, continuing to increase as the global temperatures steadied, highlighted in figure 3.²⁶

Figure. 3 Arctic (land stations north of 60°N) and global mean annual land surface air temperature (SAT) anomalies (in °C) for the period 1900-2015 relative to the 1981-2010 mean value. Note that there were few stations in the Arctic, particularly in northern Canada, before 1940.²⁷



Source: Arctic Report Card, 17 November, 2015.

http://www.arctic.noaa.gov/reportcard/air_temperature.html

The Human Terrain

The story of people in the Arctic is as diverse as the weather and climate. Despite the harsh environment of the Arctic, archeologist and science approximate that between 40,000-12,000 BCE, small groups of hunter-gatherers moved up through Eurasia into the Arctic Circle and no later than 12,000 BCE crossed into America.²⁸ As early as fifth century BCE

acknowledgment of a place “far north with extreme cold eight months of the year” made it into Greek history.²⁹ The Paleoeskimo cultures throughout the Arctic can be traced to 1000 BCE to 1000 CE. As for the European races, as early as the 11th century, Russians called Pomors or Sea dwellers lived and explored the north shores of the White Sea traveling east, and Vikings started spreading out east towards as early as the 9th century towards Iceland, trading, warring and hunting.³⁰ One could conjecture these peoples all sought materials and resources that were not in enough abundance elsewhere, so at great risk and discomfort, they moved into the Arctic region, not so dissimilar to the continued drive of humans in the area today.

Jumping forward into the mid-20th century the population grew based on resource development in the region and increasing access to modern medicine and food sources. Today, the Arctic population is in a state between slowing down and declining in some areas, remaining sparsely populated compared to other regions of the world. It’s approximately “four million people,” represent “over forty different ethnic groups” with less than ten percent being Indigenous people while most residents live in larger towns but it is this indigenous group that is most under represented and most exploited.³¹ To speak to them as a whole entity is not meant to deny their individuality but some generalities need to be drawn to illuminate the complexity of integrating this group’s knowledge and will into the decisions made in regards to their homeland.

The Arctic peoples are hunter-gatherers still as much as possible to this day, preferring to get their food from the land. Quiet and peaceful unless provoked, their culture and independence have been under pressure to a variety of reasons, with the influences of the global environment bearing some responsibility. This interconnectivity with the world means

the natives of the Arctic suffer from the same ills as other communities: drugs, alcohol, and poverty but disproportionately to other communities. In part, they are stuck between two worlds not accepted by one in many cases because of their cultural differences and unable to live completely in the other due to tightening restrictions on their traditional practices by those governments and organizations that see them only as an impediment to their goals. The Indigenous people want their children to have a future and realize the world, weather and climate are changing faster than they can adapt to varying degrees. Once often isolated, brushed aside, mistreated, and marginalized, today the Arctic peoples are more connected globally and represented by governments and councils, to varying degrees, with those who live in Canada, the United States, Greenland, Sweden, Norway, and Finland being more empowered to progress, seeing continued gains as those in Russia lag behind.³² If there is one good news story springing forward from the changes in the Arctic, it is that the Arctic Indigenous people are moving closer to the center of the conversation, exercising self-determination as they form councils and even reclaim major areas under their control, as the Inuit in Canada did when they negotiated the Nunavut Land Claims Agreements which drastically improved their property, hunting, and fishing rights.³³

Today, six organizations represent the Arctic Indigenous People who have Permanent Observer Status on the Arctic Council. The Indigenous Peoples Secretariat carries the voice and acts as a liaison for the six organizations that have Permanent Participant status in the Arctic Council. These forums are making great strides in building cooperation and collective effort in the Arctic, integrating and elevating the voice of the Indigenous people into the decision-making bodies around the region.³⁴ The incredible complexity of the Arctic geography serves to highlight the scientific and human nature of the problem. Leading experts

in the field who understand the intricacies of the challenges, sitting at the head of the table, in peer equal positions to the military, to help ensure the best science and accompanying predictions are guiding the way forward in the Arctic. Failure to move forward based on the best science is a sure way to either overshoot or undershoot the preparation for what will come next in the polar north.

Opportunities

There are a multitude of potential opportunities resulting from the polar ice cap receding, all with associated risk and cost, both considerably higher in the Arctic compared to other regions. For every upside to going into the Arctic, there is a potential downside. This dilemma is what the Arctic nations must wrestle with as they move forward aligning and developing the supporting capabilities in the region. To exploit these opportunities requires an increase in infrastructure, search and rescue capabilities, and more ice breakers, all of which raise the cost of doing business in the Arctic.³⁵ There are two economic interests in the Arctic with significant powers behind them, the energy and shipping industry, with mining and fisheries playing an important secondary role.³⁶

The energy wealth of the Arctic is front and center of the race to the region, estimated at “13% of the world’s oil reserves and 30% of the gas reserves, with 84% of those being offshore.” The estimated energy reserves of Russia and the US combine for almost 2.7 trillion dollars.³⁷ Behind these numbers is the debate over whether or not more drilling in the Arctic is worth the risk and cost, as technologies such as fracking and new discoveries in areas closer to the using market have made extracting oil and natural in the Arctic less viable.³⁸ Fisheries in the Bering sea fishery alone count for over 50 percent of the seafood in the US and the area provides essential sanctuary waters for species to reproduce in.³⁹ These resources along with

rare earth minerals, uranium, gold, diamonds, lead and zinc, copper, and coal are crucial enablers in an expanding world that need them for growth and development. China is seeking an ever-expanding as role as the global leader in rare earth mineral holdings, trying to gain control of known mineral resources in the Arctic.⁴⁰ These opportunities are driving new alliances between partners who stand to benefit from each other in the region, like Greenland and China.⁴¹

A potential longer term savings and sustainable benefit may be in the opening of the Northwest Passage and Northern Sea Route, which will cut transportation distances, time, and cost to the shipping industry. But there are many nuances to the realities of these predictions. At first look, the traffic on the Northern Sea Route did increase, up 53 percent from 2011-2012 (46 ships). The opening of the Northern trade routes offers great rewards, cutting up to “40 percent of the distance off the southern route that goes through the Suez canal.” This change could save approximately “1,000 tons fuel (valued at 650,000)” per ship and cuts the time from forty-three to twenty days,” savings not only time but the expense of salaries and life support for the crews. The Northern Sea route was open for “141 days in 2011” making travel possible.⁴² But, Russia has continued not to recognize this route as being in international waters and demanded all nations ask for permission to transit since 1965. Both Russia and Canada view the passages primarily as “internal waters” subject to their control and the US sees them as “international straits.” Connecting the oil-rich Arctic to energy-hungry countries such as China, who must ship their oil from through the Malacca Straits. Shipping from the Arctic from the top of the World through the Bering Straits would cut significant time, cost and risk from their current source, the Middle East.⁴³

These interconnections between Russia, Canada, China and the US, creating potentially huge savings and the interrelated trade makes for stronger partnerships between the Russia, Canada, China, and the US. The cautionary tale is that many of the economic numbers are from estimates that are at best guesses considering that a large portion of the Arctic remains under ice for most of the year. Also, when considering the expense of operating in the Arctic, investors and governments in the Arctic will need to proceed together with caution to maximize the potential of the region.⁴⁴

Figure. 4 The Arctic, the Arctic Ocean, Arctic Circle and Key Passages



Source: The World Factbook, Accessed 26 November, 2015.

https://www.cia.gov/library/publications/the-world-factbook/geos/print_xq.html

Threats

“We have been for some time clamoring about our nation’s lack of capacity to sustain any meaningful presence in the Arctic.”⁴⁵

Adm. Paul F. Zukunft
Coast Guard Commandant

The two greatest challenges to peace in the Arctic Ocean are the environmental changes that are dynamic and poor management of the dwindling resources in a growing world where the competitive nature of humanity still thrives. As the Arctic Nations move towards laying claims to the resources that were untouchable up to the last ten years or so, friction is inevitable. In this environment, Russia is simply more prepared than any other Arctic nation to move forward based on force posture and Arctic capabilities. That reality may not mean much to the US and Canada but the perception that it does is still there and is driving domestic political concerns as Russia and China pare up to conduct business in the far north. So far, the nations of the Arctic Council have ceded their differences, primarily centered on land claims, to be settled in the International Court. It is yet to be seen what will happen when the judgements swing against Russia or Canada, the two major landowners in the region.

Russia

A cornered Russia is arguably the most dangerous opponent the international community faces and could be a major threat in the Arctic, but this is unlikely considering cost to benefits in the region. Since invading Crimea and the Ukraine, the post-Cold War peace has been fractured. Russia has re-opened ten bases across the Arctic and conducted the first large scale training event there since the Cold-War with the Northern Naval Fleet, its largest which is headquartered in the Arctic out of Murmansk. These maneuvers were seen by some as overly aggressive, adding to their other provocations. Make no mistake; Russia is prepared to lead in the Arctic as the most capable power. It possesses 41 ice breakers, including six nuclear powered ones, compared to the two that the US owns and a small handful from the rest of the Arctic nations.⁴⁶ It has a history steeped in Arctic exploration, is

the leading landowner, and is re-expanding its power in the region. There is most likely no catching up to Russia in creating capabilities to operate in the Arctic for the foreseeable future, considering timelines and investment cost for shipbuilding. Further, they don't appear to be slowing down as key officials continue to make bold statements of ownership over disputed parts of the Arctic, and Russia recently filed a claim for the claim that "would expand their total territory on land and sea by about 1.2 million square kilometers, or about 463,000 square miles," further solidifying their position as the largest country in the world.⁴⁷

China

China, as a non-Arctic state, is a smaller opportunistic player but with arguably the most to gain and least to lose in the region, linked primarily to trade and shipping through the Arctic passages, mineral contracts with Greenland and Iceland, and a new energy alliance with Russia.^{48,49} They are Arctic capable, owning one icebreaker, now building another one, with eyes on research and future possibilities. China has been active in the Arctic since 1999 conducting multiple expeditions into the area with plans for more in the future.⁵⁰

With over 85 percent of China's oil imports come from the Middle East, the Arctic could change this statistic to their advantage. Their status as Permanent Observer on the Arctic Council, granted in May of 2013 gives them a front row seat to all the deliberations ongoing in regards to the Arctic.⁵¹ This membership is a positive sign but their belligerent actions in the South China Sea, aimed at extending their influence over maritime routes, may be a cautionary signal as to how they will flex their growing naval capabilities towards affecting sea traffic from SE Asia that seek to benefit from the Arctic routes as well. By sticking to the business of the Arctic, refraining from aggression against any member state and playing by the international rules China can emerge a big winner in the Arctic. Considering

China and Russia, China is in a much better place economically, tied to the global economy and more predictable than Russia.⁵² They are our best hope, in that their partnership in the Arctic may better ensure that Russia moves forward in a responsible manner.

These alliances and provocative moves by Russia and China do not deter from the need for a civilian-led organization at the lead of Arctic cooperation, but speak to why a powerful and Arctic capable military presence must be on hand, trained, and ready; underwriting the peaceful efforts geared towards science and development for the good of all.

Strategy

The Arctic is one of our planet's last great frontiers. Our pioneering spirit is naturally drawn to this region, for the economic opportunities it presents and in recognition of the need to protect and conserve this unique, valuable, and changing environment. As we consider how to make the most of the emerging economic opportunities in the region, we recognize that we must exercise responsible stewardship, using an integrated management approach and making decisions based on the best available information, with the aim of promoting healthy, sustainable, and resilient ecosystems over the long term.⁵³

President Barack Obama
May 2013

Much as Space became a new frontier for those capable of participating, as goes the prediction for the Arctic based on the changes in the environment driven by climatic condition, outlined in the 2004 Arctic Climate Impact Assessment. This report highlighted the prediction of a rapidly thawing Arctic and prompted a second study, commissioned by the Arctic Council to address the impact to shipping in the region; the 2009 Arctic Marine Shipping Assessment.⁵⁴ The results of both of these studies created a flurry of action aimed at synchronizing activities across the intergovernmental and military services to deal with current and future challenges. The course laid out in the national strategic documents starting in 2009 with the release National Security Presidential Directive (NSPD) 66 and Homeland Security Presidential Directive (HSPD) 25. These documents began laying the groundwork

for re-focusing on the new realities in the Arctic, calling for improvements to infrastructure there to make navigating the waters feasible working through the International Maritime Organization (IMO).⁵⁵ Other key documents followed to include the National Strategy for the Arctic Region, DoD Arctic Strategy, and military service's Arctic strategies.

This strategic guidance and the complexity of the Arctic region demanded “innovative solutions” and “new way” to solving the challenges in the Arctic to “sustain the spirit of trust, cooperation, and collaboration, both internationally and domestically.”⁵⁶ The President directed the government approach along three lines of operation with “strengthening international cooperation” being central to organizational design. The guidance was further vectored by four “principles,” two of which add to the considerations of building a headquarters; “make decisions using the best available information” using “current science and traditional knowledge” and “pursuing innovative arrangements” building relationships across all partners in the region.⁵⁷ Left in the natural vacuums of bureaucracy, this guidance and the efforts to implement the directed actions may be less than optimal. These strategies with other forms of strategic direction are shaping the vision of the future in the Arctic and have a corollary in an example given by Elon Musk, the well-known founder of Tesla and Space-X. His life's work focuses on developing the means to find and get to another solar system that will sustain life and in the shorter term developing the technologies in the energy sector that will allow a smoother transition off of fossil fuels, whenever that eventuality occurs. Is this goal possible? Those that have limited vision might say no; there are too many other pressing issues to deal with now. Those with the ability to dream and think strategically would say yes and work towards that end. Musk has been very successful at innovating,

engineering and business because he is intensely focused on gaining one primary thing, the ability to propel an object through space indefinitely.⁵⁸

So how does this example inform the execution of the President's vision for the Arctic and the continued shaping of it? The polar region requires leadership with vision for the future that can bring Arctic nations and others together on the issues that impact all, including mutual benefits, while each nation pursues its own sovereign interest. Leadership must be able to see past the immediate opportunities and threats to develop a route into the future. This vision translated into strategy should guide our efforts in the region. The Arctic policies have finally made leeway towards this endeavor. Now a headquarters capable of implementing the guidance needs to be formed with clear lines of authority, unity of command and a budget focused on the real issues in the Arctic, not just defense.

ORGANIZATION

"We don't have [the] term. We don't really understand what 'advocate' means. ...I can't mandate anybody to purchase or train to capability, but we are the advocate for DOD for all of the agencies in the services, and we're studying that real hard." ⁵⁹

Admiral Gourtney
CDR, USNORTHCOM

The organizational structure of the leading headquarters for the Arctic should be clearly enabled to facilitate strategic level thinking necessary to bring the collective efforts of all together, along with clear lines of responsibility and resourcing to move forward. The US answer to this problem was somewhat traditional in nature as the President assigned a military combatant commander, through the Unified Command Plan, to the Arctic area of responsibility but with vague terminology as noted by Admiral Gourtney; this general method of dealing with the world has been the case since 1947 in an effort to add unity of effort in joint and international efforts.⁶⁰ The Unified Campaign Plan for 2011 assigned

USNORTHCOM as the “advocate” for the Arctic.⁶¹ The US Coastguard is further assigned as the lead federal agency for the region.⁶² These command relationships and non-doctrinal command authorities seem to work, as long as the area is free from combat, meaning unity of effort and command within the state can take a backseat to other priorities.

The USNORTHCOM and NORAD commander leads the only a bi-national, intergovernmental and interagency four-star headquarters in the DoD, representing the US/Canadian Alliance directing homeland defense, including military operations in the Arctic, all from Colorado Springs, Colorado.⁶³ It is completely connected within the intergovernmental system to execute its mission. The diversity in this headquarters is the strength which allows for the complex coordination required to address the complexities of the region. Most of its work force are “service retained, or in a prepare to deploy status.” To say the headquarters is busy focused on protecting the homeland from threats is an understatement, from conducting intercepts of Russian aircraft to watching for Intercontinental Ballistic Missiles (ICBMs), this all while coordinating Defense Support of Civil Support Authorities; helping with everything from counterterrorism to emerging disease threats to natural disasters.⁶⁴

Based on the changes in the Arctic, the region is now a “key focus area” with its own line of operation. USNORTHCOM conducted a review to see how they could support the range of intergovernmental agencies in the region and identified a multitude of “deficiencies in all-domain awareness, communications, infrastructure (including a deep water port), mobility (including an adequate national icebreaking capability), search and rescue enabling capabilities, Arctic Ocean charting, and the ability to observe and forecast Arctic environmental change.”⁶⁵ These shortfalls bear witness to the challenges that a headquarters

can have when separated from the forces in the Arctic who are busy trying to implement strategy or left wondering what the next steps are while not unified in a command structure.

Leveraging what USNORTHCOM has already learned in the joint, interagency, intergovernmental and multinational environment (JIIM), considering their two standing joint task forces (JTFs); JTF North Capital Region, JTF North, and the former JTF-Alaska; building a civilian led organization in the image of a joint interagency task force (JIATF) headquarters in Alaska should be plausible. This headquarters would have a civilian board of leadership representing all the key federal agencies, connected to military peer representatives from Alaska Command (ALCOM), United States Army Alaska (USARAK), and District 17 of the US Coast Guard. Its location would be in or near the Arctic, while still subordinate to USNORTHCOM. This non-standard approach could best achieve the desired ends of a peaceful and stable environment where collaboration and cooperation would be the arbitrators of competition, not aggressive military action.

This organization would benefit from continuity of effort, consistency of message, and accountability over time as it would lack the typical high rate of turnover in military headquarters. A civilian structure would enable the further building of long-term relationships, building trust amongst all participants while managing the political landscape and minimizing friction between interested parties. These are all important factors in building solid organizations that can sustain effort at the strategic levels.⁶⁶ Direct connectivity to the Arctic Council would further maximize results, while being able to work with the military in determining the necessary to support the defined efforts.

Change and adaptation are not easy for large organizations, used to conducting the business of their service. Mission and culture further make adapting hard to do as services

tend to operate in their traditional roles and fight for resources accordingly.⁶⁷ Military Combatant Commands are designed first for directing military action in war or preventing it, established with a mission and geographic area by the Unified Command Plan.⁶⁸ This new headquarters is a change to address the incredible complexity of the problem at hand as many other leaders and organizations have faced.

History has shown us through trial and tribulation how the great and not so great leaders and their units have fared. From George Marshall in WWII standing as an exceptional example of a leader who built a military for war and marshalled a new order afterwards, to FEMA Chief Michael Brown and his organization that showed glaring shortfalls during Hurricane Katrina, failing miserably. Strong relationships and alliances with competent members, build trust that can be counted on into the future. The predicted opening up of the Arctic to year round traffic and the international friction associated with it will require leadership and organizational design that can reduce the possibility of conflict and encourage collaboration amongst the varying interested nations and parties. Science, economics, and diplomacy must be in the forefront of the way ahead, as long as the security environment allows for it and if it doesn't, USNORTHCOM can step in to fill the role it was built for.

Recommendations

The national strategic guidance issued for the Arctic provides measures to weigh success in the region against US efforts there. Leadership must be able to identify gaps, filling the space with informed answers. The overall approach to the efforts in the Arctic aims to treat the environment as a global commons, avoiding confrontation with other Arctic nations. The real adversaries in the Arctic are the environment and unmanaged competition which must be adapted to as these dynamics change while maximizing the benefits of this new

open Arctic paradigm. Further effort and study towards any one or more of the following recommendations may enhance future efforts in the Arctic as much of the developed world looks to opportunities there with great anxiety and anticipation.

- **First Recommendation:** the creation of a permanent subordinate Joint Interagency Task Force (JIATF) like headquarters subordinate to USNORTHCOM. This option has numerous benefits in regards for USNORTHCOM, which already has a very diverse and complex mission. It would put the mission in the lap of Arctic experts who can communicate with other specialist around the world on an equal basis. When the US military leads, it is often perceived as an unequal dialogue and this creates undue friction. The headquarters should be able to communicate with what are primarily private and intergovernmental bodies or groups, such as the Arctic Council and the Arctic Indigenous peoples, in a non-confrontational way. A board of directors' concept with a military co-equal in rank but in the supporting role of the civilian lead of the governing body would reflect the sincerity of the US in following through with the Presidents goals of pursuing peace and cooperation, while making sure all actions have the necessary military support. This model would also serve as an example for other countries which may be encouraged to follow the US lead, furthering the peaceful approach to operations in the Arctic. This option can benefit USNORTHCOM which already has a very diverse and complex mission set by providing a clearer, more informed picture of a region that is thousands of miles away with detached military organizations operating there.
- **Second Recommendation:** station a JIATF like headquarters in the Arctic or near the Arctic. Credibility can come from a variety of sources but to be an Arctic nation and

not have the headquarters there is to miss an opportunity to build knowledge, permanent relationships with all concerned and experience firsthand what living and operating in the Arctic means. To speak of the Arctic as some place far away, when discussing with other nations the policies and actions to take place that will determine the fate of the Arctic people and resources, diminishes US credibility and further separates the government from the indigenous people that live there. There are several options for fixing this issue in short order, at a low cost based on current force structure and infrastructure in Alaska. Alaska Command (ALCOM) which is now apportioned to USNORTHCOM and located in Alaska could provide wintering headquarters for the multinational JIATF HQs with near Arctic access and all necessary support in the city of Anchorage for scientific, economic and diplomatic connections around the world or FT Wainwright in Fairbanks Alaska could serve the same purpose, with closer access to the Arctic and the academic connections at the Arctic Research Science Center located at the University of Alaska, Fairbanks. As appropriate, the HQs could deploy into the Arctic based on seasonal needs tied to the changing conditions there, better able to overwatch and C2 the increased range of activities there..

- **Third Recommendation:** build more Arctic capacity in US and allied forces that will ensure interoperability. By raising the number of exercises of appropriate size commensurate with the headquarters and other Arctic nation participants, the new civilian-led JIATF HQs can gain experience and identify shortfalls in requirement and capabilities. Further expanding the Northern Warfare Training Centers ability to conduct BN size training courses which focused on building Brigade Combat Teams

would raise expertise within their formations and across the Army. These training events and schools could be synchronized to support further the rescue and recovery operations in support of shipping and scientific exploration. Events such as these would further promote exchanges of personnel, both civilian and military, along with rotating the control of the exercises to each of the Arctic nations on an annual basis tied directly to what Arctic Nation is currently chairing the Arctic Council. The exercises would also allow countries outside of the eight Arctic Nations that utilize the Arctic passages or that conduct economic exploitation there to contribute resources in support of these operations, fostering a greater sense of cooperation amongst all interested parties.

Conclusion

The cycle of change, adaptation, and evolution will continue as long as humans exist. The need to work collectively is ever more critical in the Arctic, from efficiencies gained to a more stable balance of shared power between nations. The US must measure its approach in the region based on predicted timelines, pressing priorities and fiscal constraints in line with strategic guidance. We can take steps that are fiscally responsible while increasing our Arctic military capability that will underwrite the economic opportunities and the accompanying risk that are arising there. In a chaotic world, ruled still by global power politics, diplomacy requires capable military force. That force should be resourced for the mission and guided by informed direction from an informed joint JIATF like, multinational, interagency, civilian-military headquarters, stationed in the Arctic that is subordinate to USNORTHCOM; tied to forces properly based/located, equipped, manned and trained. This headquarters is an essential

component of furthering US efforts in the region, expanding capabilities and possibly most important, improving US credibility as an Arctic nation.

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Appendix A

Additional Observations

- **First Observation:** All services minus the Army currently have an Arctic strategy on the shelf and are moving towards implementing those strategies, including finding ways to resource those requirements. The one service that truly can operate in the Arctic on the ground has no Arctic strategy. Now with the pivot back to Pacific, the time is right to revisit what part the Army is to play in the future of the Arctic and ensure means are sufficient to accomplish the task ahead. The Army represented by United States Army Alaska headquarters in Alaska (USARAK) which mans, equips and trains its forces to be capable of conducting operations in the Arctic belongs to the United States Army in the Pacific (USARPAC), which has no Arctic mission or command relationship with USNORTHCOM. If any task needs to occur on land in the Arctic, including on the ice cap, it is primarily the Army who would conduct it. This new strategy would better define expectations for Army forces, help with operational needs assessments for purchasing upgraded equipment, and help make better decisions on forces needed there in the future as base realignment and closures continue.
- **Second Observation:** The Army requires a specified proponent for the Arctic on the Army staff that has the skills and experience to work directly with USNORTHCOM, ALCOM, USARAK, Coastguard and the proposed Arctic JTF HQs. This position would greatly enhance building a viable strategy for the Army in the Arctic.